

## PRIMERGY TX150 S6

### Mono socket Quad-Core Intel® Xeon® UP based Tower Server – World class in quality and redundancy

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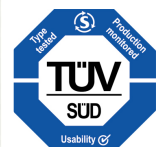
PRIMERGY TX Tower Servers ensure energy efficient, carefree and continuous operation with proven data center technology. Their design for maximum ease of use and ease of management has been honored with industry design awards. The latest processor generation combined with innovative air flow cooling technology ("Cool-safe™") assures a long life and the highest possible performance at work. And as your business grows, so do our PRIMERGY TX servers, providing plenty of headroom for expansion so that you benefit longer from your investments in PRIMERGY tower servers.

For corporate workgroups and remote sites, PRIMERGY TX servers ensure less troubleshooting and lower costs with their complete PRIMERGY ServerView Suite remote management functions – flexible management from anywhere at any time.

The flexible custom supply model and our build-to-order process mean that only fully built and pre-tested solutions are shipped to customers, who can select from a broad family of tower models to meet their individual needs.

#### PRIMERGY TX150 S6

The PRIMERGY TX150 S6 tower server delivers new levels of energy efficient performance with Intel® Xeon® Quad-Core processor 3300 series. This is achieved with up to 1333 MHz FSB clock rate and with Intel's new state-of-the-art multi-core optimized microarchitecture. A server with this processor proves to be a particularly powerful system that can respond quickly to your requirements. Enhance your efficiency when it comes to simultaneous execution of multiple applications and downloading mass data. The processor with the Intel® 3210 chipset also supports virtualization and EM64 technology. This sixth-generation tower server combines high performance with low noise. The 3.5-inch SAS or SATA or 2.5-inch SAS hot-plug hard disks can be replaced easily while the server is in operation. High data security is offered thanks to built-in RAID 1 functionality and an optional ibutton RAID 5 implementation for SATA or a modular RAID for SAS configurations. The standard iRMC S2 (integrated Remote Management Controller) offers enhanced system management and graphics based on IPMI 2.0 technology, and the redundant power supply module further increases operational reliability. Dual-Core Xeon® processors and an even more power saving Celeron® processor round off the offering alternatively.



Benefits	Key Features
<ul style="list-style-type: none"> <li>■ High security against physical loss of data</li> </ul>	<ul style="list-style-type: none"> <li>■ ECC, built-in RAID 1 functionality and optional ibutton RAID 5 for SATA or modular RAID for SAS configurations</li> </ul>
<ul style="list-style-type: none"> <li>■ Tailor made availability, offers the security level which is recommended by your individual application demands</li> </ul>	<ul style="list-style-type: none"> <li>■ Hot-plug HDD infrastructure (standard)</li> <li>■ Hot-plug redundant PSU (optional)</li> <li>■ ServerView Local Service Panel (LSP) optional for customer's Service on its own</li> </ul>
<ul style="list-style-type: none"> <li>■ Allowing the platform to do more in less time, IT departments can consolidate applications and more effectively employ the server with less power consumption</li> </ul>	<ul style="list-style-type: none"> <li>■ Intel Quad-Core processor, provides four execution cores in one physical processor with less power consumption</li> <li>■ Energy efficient Intel Celeron processor even more power saving</li> </ul>
<ul style="list-style-type: none"> <li>■ Expandability options for further growth</li> </ul>	<ul style="list-style-type: none"> <li>■ Up to 4x SATA or 4 (6)x SAS/SATA 3.5-inch, up to 8x 2.5-inch SAS hard disks, 6 PCI/PCIe slots, (5 with SAS), 1x Gbit LAN plus extra Service LAN for iRMC S2</li> </ul>
<ul style="list-style-type: none"> <li>■ Investment protection through optional tower to rack conversion kit</li> </ul>	<ul style="list-style-type: none"> <li>■ Universal tower-to-rack conversion kit</li> </ul>

<b>Type</b>	Mono Socket Tower Server
<b>System board</b>	D2559
Chip set	Intel® 3210
Processors	Intel® Celeron® / Intel® Pentium DC / Core2 Duo / Intel® Xeon® UP (Dual- or Quad-Core)
Type / Frequencies (GHz)	440 (2.0) 35W / E2140 (1.60) / E4500 (2.20) / 3065 (2.33) / E3110 (3.00) DC all 65W / X3210 (2.13); X3220 (2.40) GHz QC 95W / X3350 (2.66); X3360 (2.83) all 95W QC
Front-Side-Bus	800 / 1066 (X32xx) / 1333 MHz DC Xeon UP und X33xx
Second-Level- Cache	512 KB / 1 MB / 2 MB / 4 MB / 6 MB DC Xeon / 2x 4 (32xx) / 2x 6 MB (33xx), ECC
<b>Memory</b>	512 MByte up to max. 8 GByte
ECC unbuffered DDR2 800 SDRAM; 2 banks with 2 slots each; (512 Mbyte, 1, 2 Gbyte each) Mix and match possible; with dual channel operation better performance (2 modules with equal capacity necessary). Single channel (1 module) configuration possible.	
<b>Flash-EPROM</b>	
Local BIOS update with floppy disk; Remote BIOS-Update via LAN with Global Flash and service partition	
<b>Interfaces</b>	
Serial	1 x serial RS-232-C (9-pin) usable for iRMC or system or shared 1 x serial RS-232-C (9-pin) (optional)
Centronics (parallel)	1 x 25-pin, EPP/ECP compatible (opt.)
Keyboard, Mouse	2 x PS/2
USB 2.0	1 x front, 4 x back 2 x internal for backup drives, 1x USB stick
Graphics	1 x VGA (15-pin)
LAN	1 x LAN RJ45, 1 x Service LAN 10/100
<b>Onboard controller **</b>	
SATA variant (Intel® ICH9R)	6 port SATA for 4 internal HDD's with RAID 0, 1, 10 for Windows and Linux, RAID 5 iButton key optional, 2 ports for accessible drives also in SAS variant
SAS configuration in PCIe slot <b>either</b> LSI 1068e  <b>or</b> LSI 1078	8 port SAS for internal HDD's and internal backup devices with RAID 0, 1 (Integrated Mirroring Enhanced also for odd numbered HD's for Windows and Linux) with RAID 0, 1, 10, 5, 50, 6; 60 (256 or 512 MB RAID Cache and opt. BBU)
LAN (Broadcom BCM5755)	1x Ethernet 10/100/1000 Mbit/s (PXE-Boot via LAN from PXE server), iSCSI Boot (also diskless) via onboard LAN
Server management	Integrated Remote Management Controller (iRMC S2) incl. graphics controller, IPMI 2.0
TPM (optional)	Infineon / 1.2
<b>Hard disk drives</b>	73, 146, 300 Gbyte 3.5-inch SAS <b>or</b> 36, 73, 146 Gbyte 2.5-inch SAS <b>or</b> 160, 250, 500, 750 Gbyte 3.5-inch SATA No mix SAS / SATA, no later conversion from 3,5 to 2,5-inch possible
1 Gbyte equals one billion bytes when referring to hard disk drive capacity; accessible capacity may vary.	
<b>I/O Slots:</b>	
2 x PCI-Express x8, short 1 x PCI-Express x4, short 3 x PCI 32-bit / 33MHz, 2x long (5V); (in SAS configuration 1x PCIe occupied with modular RAID)	
<b>Drive bays</b>	
for hard disks	4x 3.5-Zoll, for Hot-plug SAS/SATA <b>or</b> 8x 2.5-Zoll, for Hot-plug SAS (in slide-in chassis)
for optional hard disks	2x 3.5-inch HDD box SAS only in SAS configuration (occupies 2x 5.25-inch bay)

for accessible drives	3x 5.25/1.6-inch, (all possible options described in relevant system configurator) 1x 3,5/1-inch, for FDD (optional)
<b>Electrical values</b>	
1x standard or 2x optional redundant hot-plug power supplies	
Output power	350 W / 1 + 1 x 400 W each
Rated voltage range	100 - 240 V
Rated frequency	50-60 Hz
Max. rated current	100 V - 240 V / 6 A – 3 A
Rated current in basic configuration	100 V - 240 V / 1.9 - 0.8 A
Active power (min – max)	64 - 232 W
Apparent power (min – max)	86 - 263VA
Heat emission (min – max)	230 - 835 kJ/h (218 - 792 btu/h)
<b>Temperature/Noise/Dimensions/Weight</b>	
Ambient temperature	10°C - 35°C (DIN IEC 721-3-3) class 3K2; ETSI 300 019-2-3 Class 3.1
Declared noise in according with ISO 9296	Idle* / operating* (*ISO 7779) ETSI 300 753 Class 3.1
Sound pressure L <sub>pAm</sub>	26 db(A) / 35 db(A)
Sound power L <sub>WAd</sub>	4.4 B / 5.3 B (1 BEL = 10 db)
Dimension of floor-stand (HxWxD)	444 x 205 x 605 mm, incl. all plastics
Rack (HxWxD)	221 x 482 x 607 mm; Rack mounting depth mm; 5U
Weight	Up to 28 kg
<b>Compliance with Norms and Standards</b>	
<b>Product safety</b>	
Global	IEC 60950
Europe	EN 60950
USA	UL 60950 3rd. Ed.
Canada	CAN/CSA-C22.2 No. 60950 3rd. Ed.
<b>Electromagnetic compatibility</b>	
This product and the released accessories, are in compliance with emission class A. In certain cases measures have to be taken to reduce the electro magnetic influence to other equipment.	
Europe	EN 55 022 class A, EN 55024, EN61000-3-2 / -3, ETSI EN300386
USA / Canada	FCC class A
<b>Declaration of conformity</b>	
Europe (CE)	89/336/EEC; 73/23 EEC
North America	FCC class A
<b>Approvals</b>	
<b>Product safety</b>	
Global	CB
Europe	CE
USA / Canada	CSA <sub>US</sub> / CSA <sub>C</sub>
There is general compliance with the safety requirements of all European countries and North America. National approvals required in order to satisfy statutory regulations or for other reasons, can be applied for on request.	
<b>Supported operating systems</b>	
See actual release status <a href="#">operating systems</a> : e.g. Windows 2003; Novell SUSE Linux Enterprise Server, Red Hat Enterprise Linux; VMware Infrastructure (Support of Debian, Ubuntu, Mandriva Linux and other Linux derivatives <a href="#">on demand</a> )	
** For supported controllers (onboard and PCI cards for SATA, SAS, RAID, LAN, WAN, etc.), please refer to the corresponding system configurator.	
<b>Server Management</b> (see separate data sheets)	
Standard	PRIMERGY ServerView Suite; PDA, ASR&R
Optional (excerpt)	iRMC S2 Advanced Pack ServerView Local Service Panel (LSP)